

CLAIMS:

1. A sensor array with at least two sub-bridges, which are coupled together to form at least one Wheatstone bridge and which are equipped, in each of the sub-bridges, with at least two magnetoresistive sensor elements, wherein the sensor elements are sensitive to the magnetic field strength of an applied magnetic field along a measurement direction, and
5 the sub-bridges are designed to deliver a measurement signal as a function of a field component of the magnetic field, designated a measurement field, measured in the measurement direction, wherein, further, in a first of the sub-bridges at least two of the sensor elements exhibit barber pole structures with differing alignments, in a second of the sub-bridges at least two of the sensor elements are designed without barber pole structures, and
10 the measurement signals of the first sub-bridge at least largely coincide with the measurement signals of the second sub-bridge in a specified range of values around a zero point of the magnetic field strength of the measurement field.
2. A sensor array as claimed in claim 1, characterized in that the location
15 coordinates of the sensor elements of the first sub-bridge and the location coordinates of the sensor elements of the second sub-bridge along a coordinate axis running in the measurement direction are selected to differ from each other to a predetermined degree.
3. A sensor array as claimed in claim 1 or 2, characterized in that the
20 measurement field is non-homogeneous at least in the measurement direction.
4. A sensor array as claimed in claim 1, 2 or 3, characterized in that the applied magnetic field is generated by an auxiliary magnet designed as a permanent magnet.